# ADDRESS

OF

# EDGAR A. HEWITT,

*Editor of Insurance Chronicle.*

Delivered before the Southern Association of Fire Underwriters, April 7, 1876.

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PUBLISHED BY THE

AMERICAN POPULAR LIFE INSURANCE CO.,

For general circulation, and to be had gratis, at the Central Office,
419, 421 BROADWAY, COR. CANAL ST., N. Y. CITY,
or any of its sub-offices.

## GENERAL REASONS THEREFOR :

First, to do honor to whom honor is so justly due, for the production of this very superior address.

Second, to confer a favor upon the public by widely affording the pleasure of reading what one gentleman, whom we highly esteem, thus compliments :

"In the fifty-six years of my life I have read many things fascinating, on account of their suggestiveness ; but they are all eclipsed by this address, *sui generis* in its versatility of illustrations, drawn from every department of science, and unique in the brilliancy of its thoughts and sentiments, and in the perspicuity of their expression. It would doubtless arrest the attention and enlist the interest of advanced scientific, thinking, scholarly men quite as much as it would please the class of persons to whom it was particularly addressed."

Third, to attract in particular the attention of Fire Insurance men, who having read the interesting address will perhaps go on to read what follows upon the last two pages, and what is found upon the converse of this page.

| *ASSURANCE.* | | *PREMIUM.* |
|---|---|---|
| **$10,000** | for | **$60** |
| **$20,000** | " | **$110** |
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## To Best Grade Risks (Aged 20 to 55),

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BY THE

ENTIRELY NEW (10 YEARS OLD) SYSTEM

OF

## *Life Insurance.*

We beg to call the especial attention of Fire and Marine Insurance men to this "New System," since it is similar in all respects, save one, to fire insurance—so similar that it may be properly termed Fire Insurance applied to

"LIFE AS A PROPERTY."

It is no form of what is usually called "co-operative," but is scientific, yet so simple and plain that it can be easily understood, and worked by any "Fire man," indeed by anybody, while it comprehends everything in the form of Life Insurance which any one wants. It affords

Large Assurance, Large Satisfaction;
Large Economy, Large Security;
Small Risk, Small Premium;
Small Liability, Small Assets;
Small Income, Small Ratio of Income to Expense.

*IS NOT THIS THE "COMING LIFE INSURANCE?"*

IT HAS COME! and is to be had as yet
ONLY of the

## American Popular Life Insurance Co.

**419, 421 Broadway, New York.**

**Send for interesting documents.** (See page 15.)

# Address of E. A. Hewitt,

EDITOR OF THE INSURANCE CHRONICLE, OF NEW YORK,

Delivered by special invitation of the Underwriters' Association of the South, at its annual meeting in New Orleans, La., on the 7th inst.

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*Mr. President and Gentlemen of the Southern Association of Fire Underwriters:*

Most heartily do I thank you for the invitation by which I am here to address you. If my ability to make fit response to that invitation did but equal the pride and pleasure with which it was received, my desire and your expectation should not fail of abundant satisfaction. But our desires are always swifter than our doing, and I must proceed as best I can.

The object of this association is declared to be the advancement of its members in the knowledge and practice of their profession. Its service in ministering to our social enjoyment, in renewing old friendships and creating new, should not be lightly esteemed; but the chief purpose for which we meet and confer together is that we may afterwards the better think and act and feel *alone.* The excitements of the hour will not pass away unfruitful of good. The influences which are now among us will continue with us to help us long after this brilliant week is over. They will attend us on our several journeys, and go with us to our separate abodes. Whatever may be our allotted labor, they will abide with us, urging us to attempt the doing of better work, and upholding us in the doing of it.

It is true that it is the individual man who thinks, who discovers and who achieves. No man for another—no, not all men for any one—can explore that royal road which leads to the palace and sanctuary of truth. But in the pursuit of that difficult journey, the advantages conferred by such an association as this are manifold and manifest. It enables us to compare, combine and check our observations; to aid each other by friendly criticism and confidential interchanges of experiences; to bring our ideas into focus and our theories to the test of common sense. For this, the contribution of each member (whether in the shape of essay or discussion) is valuable, as each star in the sky, even the smallest and farthest, is of value to the astronomer in blazing his way through the forest of constellations.

And the reason why each man's contribution to the general store of knowledge is valuable, is because all men's contributions would not suffice to make up such a store of knowledge that from it could be derived a science of fire underwriting.

Fire underwriting is not, and under existing conditions cannot be, an exact science. It is a perpetual experiment, requiring for its successful conduct the utmost keenness of observation, quickness of apprehension, clearness of judgment and fertility of resource.

Science has been defined to be the proper classification of probabilities. It is such an observation of the facts of the past and of the present, and of their correlation to each other, as enables us from the facts of the present to predict the facts, or rather sequences, of the future. The aim of scientific thought is to apply with certainty of result the discoveries of past experience to new circumstances. By the calculations of the astronomers of thirty years ago the positions of the planet Uranus, at different times of the year, were predicted. But Uranus failed to connect. Then came an astronomer, who, from the very errors in those predictions, calculated and fixed the place of a then undiscovered planet, the existence of which was not suspected; and in due time the new planet was found in its predicted place. This is science. No approach to such accurate prediction is possible in fire insurance; neither can it be. There is no such knowledge of the facts of the past, no such knowledge of present facts, no discovery of such correlation between them, as enables us to forecast the future. It has been said that the undevout astronomer is mad. By the same token, the devout fire underwriter is mad. Practically, there is no such thing in fire insurance as the stability of average results.

Belief in a "law of average" which brings about events in a fixed order of succession, and so endows the statistician with the gift of prophecy, amounts in many cases to a blind superstition. It is pleasant to the human mind for several reasons. It formulates ignorance, and thus satisfies that large number to whom a pretty phrase stands for a profound truth. It satisfies the natural love of order and stability. It seems to anchor us to the inevitable, and so becomes an easy solution of otherwise insolvable mysteries, and a cheap satisfaction to troubled consciences. If so many thefts, arsons and murders are sure to occur among a given number of people, that fact makes easy the evasion of individual responsibility for that social state in which, and because of which, such crimes are possible.

If we are frankly to consider the problems of fire underwriting, we must dismiss this blind belief in the certainty of averages. To give predicable results, average must deal with constant factors. In fire insurance, there are no constant factors. The facts upon which the issue of any venture is based admit of no prevision. As, in attempting to solve the mysteries of life, the solution of one mystery brings into view other and more inexplicable mysteries; so in fire underwriting one problem is no sooner solved than other and more difficult problems present themselves.

The fire underwriter is like the sailor making his way in darkness through an untried sea. He has the principles of his business to guide him, as the sailor has his compass. His experience is to him like the sailor's observation of the changeful sky and wind and sea. But he has no chart, no map of the liquid desert he is exploring, and frequent soundings must be taken.

For success in fire underwriting theories and traditions will not avail without a close and constant observation of existing facts. The observation must be close, because the facts material to success are difficult of discovery; it must be constant, because those facts are continually changing.

The drift of population and its character are always changing. In the mutations of modern times, what were once prosperous towns are given over to desolation and decay, while pools of commercial stagnation are stirred by the angel of opportunity and become fountains of industrial life. In a state, where so late as 1845 there were only 150,000 inhabitants, there are now about 2,000,000. Then, its industries were confined to the rudest husbandry of the soil; now, there are in motion, within the same state, 2,500 steam-engines and 1,700 water wheels; the value of its products annually manufactured is $120,000,000, and the assessed valuation of its real and personal estate, $720,000,000. Another state —one of the original thirteen—of very nearly the same area and almost exactly the same population, manufactures annually goods to the value of $32,000,000, and its real and personal estate is valued at $270,000,000. It is plain that fire underwriting in the one state is not the same business as in the other; and that in neither state is it the same as it was thirty years ago. In the one state, the underwriter is bewildered by the growing up of new towns, the development of new industries and the influx of new people; in the other, the sudden enfranchisement of an ignorant and long time subject race has upset values, paralyzed industry, and changed the nature of every hazard.

To further disturb the calculations of the fire underwriter, there has been set up a financial policy, which makes of the producer a speculator and of the tradesman a gambler, which brings ruin to the debtor without advantage to the creditor, under which no man's gains are certain unless his business is illegitimate.

To this we have added a governing code of morals which tolerates a bank in compounding a felony, and fattens a church for hiding a shame; which so debauches the public conscience that politics is made a trade--and the only profitable trade in the country—and the two political factions are matching rogues for the next chance at the public treasury.

Our manner of living is perpetually changing, and every change brings some new peril to the fire underwriter. It may almost be stated as a truism that whatever adds to our social comfort adds also to the hazard of fire. Time was when the pipe was lighted with the burning glass, and the chimney fire was kept alive through the night by burying it in its own ashes; when the tin lantern was the only movable light, and the leather fire bucket hung in every hall; when the merchants of our largest cities lived over their own shops, were their own janitors, and made nightly inspection of their own premises; when the reluctant spark was struck from the stubborn steel, and every man was his own fireman in the dual meaning of the word.

Now, we have the lucifer match and the kerosene lamp; the furnace flue, and the steam-pipe. Our cities grow up into the air, and down into the earth. The shops of our merchants are deep and high buildings, crammed with costly stuffs; with blazing fires in the basement, and spacious hoistways to convey flame to the roof; with patent heating and lighting apparatus, in charge of those who have neither the sense to regulate nor fear them; with wide and unprotected windows, and costly but brittle fronts, easily crumbled by heat, and in which a small disfigurement makes a great loss.

The aggregation of population and values in modern cities brings many advantages to each citizen, but greater immunity from loss by fire is not one of them. The object of insurance is the distribution of the hazard. The tastes and business necessities of the present day operate in the contrary direction—to compact and unify the hazard. To say nothing (where much might be said) of the concentration in values in certain trade centres, it is enough for illustration to mention that the burning of a window curtain or the scorching of a wall, which a few years since would have been of small account, may now involve the loss of hundreds of dollars.

Great cities have existed in every age; but such great cities as these of our time, busy with so many industries, rich in so many storehouses, fed by so many streams of commerce—cities in which so many people are hived in tenements constructed to shelter the greatest possible number in the smallest possible space and at the least possible cost—cities so convenient as refuges for adventurers and criminals, have never before risen and flourished on this planet.

The constant changes in our social state compel as constant changes in our mode of building. The structures of mediæval times have been fitly called "the books of those ages." All building is an expression of the genius of its time. In former times houses, like character, were built of sound material and with strong supports. Labor was cheap, tastes simple, desires moderate, and the price of the use of money not such as to make substantial work unprofitable.

We have changed our habitations with our habits: we build as we live—for show and not for substance. If buildings are books, the books from which future generations must interpret and judge us (if haply the record shall last so long) will testify against us. Instead of the old-fashioned chimney, the mortar in which was tempered with brains and every brick of which had a conscience; about which, and in its proper relation to which, all the remainder of the house was builded, we have the frail and tortuous flue, hiding its infirmities behind friendly plaster; borrowing from adjacent walls a support for which it makes no repayment; shabby, slender and unsafe.

The gaudy, the cheap and unsubstantial is the fashion of the time. Our buildings are, in general, pretentious hypocrisies. The study of our architects is to discover how little and how cheap material can be made to enclose a given space and resist a given strain. The business of the carpenter is to conceal the sins of the builder; that of the painter, to cover the faults of the carpenter.

These concealments are fraught with dangers that only keen and constant observation can discover. The main supports and anchors may be of improper material and improperly located; the strain upon them may far exceed the limits of safety; but these defects can rarely be detected when the building is complete. The putting of wooden lintels into brick walls; the use of half-burned brick, of which carbonate of lime is the principal part; the veneering with marble, which, however much it may vary in color, texture and structure, is soon and surely converted into quicklime by a moderate heat; the bracing of iron columns and stone piers with wooden joists; the want of continuity in girders, and so of support for parallel walls—these illustrate the shams and makeshifts of modern architecture, and demonstrate to the fire underwriter that eternal vigilance is the price of safety.

To aggravate the errors of construction, there is the increased size of modern buildings. Fire consumes in direct ratio to the size of the enclosure in which it originates. It has been kept for weeks within the wooden walls of a ship, and finally extinguished there. It cannot live without oxygen. Churches, theatres, factories, and big buildings generally, burn readily and rapidly, not more because of the combustible nature of their contents than because of their superior facilities for supplying oxygen to feed the fire which consumes them.

Such is the height and depth of our warehouses, that the most powerful steam-engines cannot throw water to the heart of a fire, except in the form of spray. In this form its oxygen is instantly liberated to add fuel to the flame.

How this operates to help combustion, is shown in the Bessemer process of making steel. In that process, when the furnaces have been heated as hot as Nebuchadnezzar's stokers could have heated them, water is thrown in to generate that supreme degree of heat, without which the work could not be done.

But, if it were only with *these* difficulties that the fire underwriter contends—the nomadic character of our population, the continual changes in our social and political state, and the consequent recklessness of our living and our building—his task would be comparatively easy.

To add to his perplexities, there is the constant multiplication of mechanical contrivances, and the perpetual introduction into the arts of new chemical products and processes.

To *attempt* the demonstration of this proposition is to demonstrate it. Such is the wilderness of facts which confront us, that the very effort to describe it shows us how difficult it must be to explore and traverse it.

The use of science to direct the operations of labor is now the great fact of civilization. Every particle of matter is bound in the meshes of inexorable law, and to make that bondage minister to our use and pleasure is the business of civilized man. The compass, the microscope, the telescope and the spectroscope have created for us a new heaven and a new earth. The distinction and the glory of the present age is advance in the knowledge of the construction, conditions, properties and uses of material things. We have learned to weigh the imponderable rays of light. We have put the sunshine into our balances and found, to the hundred-thousandth part of a grain, the force of its impact upon the earth. We have measured the duration of the instantaneous electric spark to the billionth part of a second. We have dived into the blazing sea of the sun's photosphere and plucked the heart out of its infinite mystery.

To attempt a barren recitation of the discoveries and mechanical contrivances of the present generation, would be to attempt in this brief hour the labor of a busy lifetime. Out of good bricks furnished to his hand the skilled workman can build a solid and symmetrical wall; but out of bowlders of various sizes and shapes, situate in distant and almost inaccessible places, the deftest hand can only make a loose heap, irregular in its shape and incoherent in its structure. It cannot be expected, therefore, that I shall present a logical or complete statement of the new factors which science and art are continually introducing into the underwriter's problem. I shall not attempt it. A few hints to awaken thought and show the necessity *for* thought, must suffice. And if, in making them, I shall present only familiar facts, let it be remembered that facts are like faces, the more precious as they grow older.

We are but just beginning to appreciate the constancy, the power and the significance of chemical changes and combinations. A grain of corn, capable, under certain conditions, of reproductive life, is cooked until that life is killed, and then eaten. Somewhere in the wonderful laboratory of the human body it is endowed with a new life; becomes brain or bone or sinew, according to the direction which it takes, and a certain quality of brain or bone or sinew as it is eaten by this man or that. And that force which converts the grain of corn into a silken banner waving welcome to the harvest, or a nerve centre signalling danger to the state, is always and everywhere in operation.

There are many new chemical products and processes with which even professional chemists are but indifferently acquainted. Not only is this true of newly discovered substances, but of those things with which we have been familiar all our lives. All the researches of science have not yet enabled us to explain many of the most ordinary phenomena exhibited in luminous flames. We do not, for example, know what is the relation existing between the chemical composition of an illuminating substance and its illuminating power. We do not even know whether it is the burning particles of solid carbon or of the vapors of hydro-carbon which gives to flame its luminosity. We are in the dark about light. We know so little of the process of combustion, that it is doubtful if any chemist can explain satisfactorily how it is that lampblack is deposited upon porcelain when the same is held in the flame of a burning lamp.

It is not strange, therefore, that our experience with the generation of fire is a series of surprises. Things apparently harmless develop wondrous combustibility. Oxide of iron makes the contact of steam-pipes with wood dangerous. Wood ashes will ignite spontaneously without the presence of live coals, given only a little moisture. Iron filings, borings and scraps, saturated with oil (as they always are when produced), have the same dangerous affection for oxygen. It is but a few years since, that some fine steel shavings, made in the process of rifling guns at the factory of the Winchester Arms Co., in Connecticut, taken from the draining pans and thrown into the scrap heap, in a short time burst into a hot flame.

In the making of analine dyes, benzole—a substance even more dangerous than benzine, differing from it in composition, in origin, chemical reaction, specific gravity and inflammability, flashing into flame at a temperature of only 80 degrees—plays a prominent part. It is used also as a mordant in calico printing, and as a solvent in the manufacture of rubber goods, combs, brushes, buttons, and even India rubber hose. How vitally this affects the fire underwriter, is shown by the fact that there is now in this country, invested in the manufacture of such goods, $8,000,000 of capital, and the value of the annual production is $15,000,000.

Many tons of bisulphate of carbon, the manufacture of which is more dangerous than the refining of petroleum, are used annually in the United States. It enters into a great variety of manufacturing processes—the vulcanizing of rubber; the extraction of oil from cotton and flax seeds; the making of spices and perfumes; into silver-plating and the manufacture of paper and lampblack. This latter substance deserves mention for its incendiary qualities. It is often made from napthaline, is used by curriers, and boot and shoe makers, and to give to the ink used in copperplate printing its velvety hue. It is dangerous everywhere. It goes into ready partnership with moisture, and quickly begets fire. In Medway, Mass., there have been three fires within the past two years caused by the spontaneous combustion of this substance.

Petroleum, too, is a new and formidable enemy of the fire underwriter. There is no other chemical product which is sold under so many different names, used for so many purposes, or contains within itself so many dangers. Although it was burned in lamps by the ancient Greeks, and present in the cement used in the building of Babylon; although Milton wrote

> "Many a row
> Of starry lamps and blazing cressets, fed
> With naphtha and asphaltus, yielded light,'

yet its introduction into general use is of recent date. The first petroleum factory in this country was built in 1854. Now, the total annual product is ten million barrels of forty gallons each. It is used in most of the arts and manufactures, where it is often adulterated with naphtha, five per cent. of which renders it inflammable at ordinary temperatures, and liable to explode with terrific force when mixed with atmospheric air. The properties that render it dangerous are inherent in its constitution, and no human skill can change or remove them.

When the great house of Harper Bros. burned for the second time, it was discovered that the fire originated in the use of benzine to clean rollers. The use of benzine was forbidden in the policies of insurance; but the Harpers proved the custom of using it, as they had used it, to be so universal that the courts decided it to be an integral part of the hazard—a fact of which the underwriters had been until that time in profound ignorance. New discoveries in the arts are not more swift and startling than are improvements in mechanism. Take the history of the cotton plant and its fibres. Originally, in the far and dim antiquity of the east, it was a sacred material, woven by patient and dexterous fingers into sacerdotal robes, and those alone. One hundred years ago, every thread of it in use was spun singly by the fingers, with the aid only of the classic distaff and the domestic spinning wheel.

Then came the cotton gin, the spinning jenny, and the power loom, which have increased the annual production of this country alone to 4,000,000 bales, or 1,200,000,000 pounds, which double the fibre nearly 150,000 times, and spin a pound of cotton into 75,600 yards, or nearly 43 miles of thread. These improvements in the machinery for manufacturing cotton fabrics have given rise to new conditions, new modes of building, and new difficulties. The machinery used in the making of cotton fabrics has been changed three times within sixty years. This has made necessary the reconstruction of old buildings, or the construction of new. The mills of former days have proved unequal to present wants, and in changing them to suit the new machinery violence has been done to their construction, and dangers have been multiplied on every hand. The floors have been unequally laden, and the speed of the machinery inordinately increased. We have now pickers making 3,000 revolutions per minute, and spindles making 10,000. We have, because of the loading with new machinery, settling foundations, bending floors, displaced shafting, undue friction, and frequent fires.

What is true of the increase in the fire hazard of cotton manufacture, is true of every other manufacture, and the mischief is that it is only by unexpected losses that unsuspected perils are revealed. We have all of us learned that celluloid is dangerous; but how many of us have discovered that emery wheels, always run at great speed and in a constant hailstorm of sparks, are now being made out of it? Which of us has kept pace with the constant changes in the manufacture and printing of calicoes? Which of us would mistrust that toy guns are made of old sardine boxes; dolls' shoes from the covering of cast-off purses; and pewter knives and spoons out of the metal cut from old coffins?

Such and so constant are the changes in all productive industries, that the fire underwriter has always before him a new problem. No chapter of history could so well illustrate the growth and spread of civilization as that which should faithfully record the development of fire insurance.

And when we have done with the mutations in building, in population, in habits and industries, we have still before us the most difficult problem of all—the calculation of the probabilities of villainy in the individual man.

In fire insurance, not the most careful inquiry of the applicant, nor the most critical and complete survey of the premises, have been found sufficient to determine the hazard with precision; because there enters into the calculation an unknown quantity upon which the result so largely depends as to make it always uncertain. That unknown quantity which defeats all the attempts of the fire underwriter to define exactly the measure of the risk, is the moral hazard. If the history of fire underwriting has demonstrated anything, it is that this unknown quantity is, perhaps, the most important member of the equation—that until its value is ascertained, at least within a close approximation, all calculations are the merest guess-work, and all attempts at fixing rates of premium as useless as a quadrant in a stormy night.

In times of general depression, when trade is stagnant, and values depreciating, fires are not only multiplied in frequency, but fearfully increased in disastrous consequences. Crazy wooden shells, stored with inflammable goods, stand year after year, so long as their contents are becoming daily more valuable; but stately piles of brick and iron and stone crumble and shrivel, and are consumed with astonishing rapidity when the market is falling, and only the constantly depreciating remnant of their stock remains.

How often have we seen a large mill, furnished with every appliance for preventing and extinguishing fire, built after the most approved style and of the most durable materials, destroyed by a fire of unaccountable origin and suspicious rapidity; while some crazy tumble-down mill, built of kindling wood, crowded with ill-arranged and badly-constructed machinery, choked with heaps of combustible material, and spitting out of its low chimney a volume of flame and burning cinders, stands year after year in seeming defiance of all the laws of chance and all the accumulated perils with which it is continually threatened.

Now, what is the cause of this apparent violation of the law of probabilities? You will almost invariably find that the larger and better mill was idle or unprofitably occupied. Perhaps its very costliness is operating as a dead weight upon the owner or lessee; perhaps it was crected in an unfortunate locality, or was badly managed. Certain it is that unprofitable mills burn.

By the use of an alloy of antimony and bismuth, a thermometer is made so sensitive as to mark the change of one-thousandth of a degree. So sensitive is it that it fluctuates with the expiration and inspiration of an observer, and the lifting of the hand before it changes the recorded temperature. But this delicate instrument does not respond more certainly to the rise and fall of temperature, than does the fire record of the time to the shifting conditions of the business world. The research of the fire underwriter, therefore, must not only be into the conditions and possibilities of material things, but into the operations of the human mind, the environments of society, the laws of finance, and the currents of trade.

Water immersed in sulphuric acid will freeze on a red hot plate; but no man ever saw water freeze. It may be gradually cooled to a temperature of about twenty degrees without congealing, but at a touch, quicker than the eye can see, the crystalization is done. If matter is thus contradictory and thus elusive, what shall we expect of mind—especially when it is surrounded by that plexus of influences which are in turn the source and the result of social action?

In the adjustment of losses, the fire underwriter is brought into direct contact with the greed and deceit of human nature. He finds that to cheat and to be cheated is the rule of commercial life, and audacious mendacity the chief help to commercial success. He finds that jute is used to adulterate silk, and soap and sugar and destructive dyes wrought into it to make up deficiencies in weight: that pure Havana cigars are filled with straw paper soaked in the steepings of tobacco stems, and run through copper rollers to give it an impress like natural leaf; that the dust made in hulling and scouring rice is used to adulterate spices; bone ashes to adulterate flour; and a paste made of starch, soap and pipeclay to conceal the imperfections of cotton fabrics. He finds, in short, that trade is a bartering of deceptions, in which he who can get rid of the most, profits the most.

Finding these things he begins to discover how difficult is his task; and how much its proper performance depends upon the vigilance of his observation and the thoroughness of his study.

I have thus briefly and imperfectly pointed out some of the conditions of success in fire underwriting. If I have succeeded in convincing you that it is a profession, the successful pursuit of which demands the highest order of intellect, I am satisfied. If it shall prove that I have stimulated any one of you to better endeavor, or awakened in any a better appreciation of the difficulty and the dignity of his calling, I shall be delighted; for words are the daughters of earth, but deeds are the sons of heaven.

In fire insurance, as in every other human concern, we must come ultimately for security to the skill and fidelity of the individual man.

The mechanic stands all day long amid whirling shafts and beating steam-hammers and busy wheels. Far down beneath him, held in bands of iron and brass, is the mighty force which moves all this machinery. The trained eye and practised hand of one man stands between him and death.

A brave ship is making its way through the darkness, over treacherous shoals and past floating icebergs that tell the land is nigh. In control of her is one man, who should know just where she is and how she should be steered to safely make the land. For his assistance observatories have been erected and telescopes constructed and the great clock of the solar system timed in all its movements; but if he is not alert and faithful, all these discoveries and all this labor go for naught.

The fire underwriter has in charge the fortunes of his company and his constituents. For his guidance in the conduct of them, experience has been formulated and recorded; but, after all, the success of his ventures depends upon his own quickness of apprehension, soundness in judgment, promptness in action, and loyalty to the right.

Gentlemen: I had reason to thank you when I began. Much more have I reason to thank you now. We expect indulgence from the gracious; but even the grace of your invitation had not prepared me for the patience of your audience.

Its **Object**, **Principle**, **Method**, **Mode**, and **Results**, constitute not merely a plan but a system, unitary and complete; entirely new in its application to Life, though precisely similar, except in **Mode**, to Fire Insurance; inaugurating not merely a "New Feature," a "New Era," a "Great Reform," but

A Complete Revolution in the Entire Business,

Displacing the Objectionable by the Desirable,

Converting the Speculative, Complex, Mysterious, Inequitable, too Costly, Doubtful,
Into the Genuine, Simple, Plain, Scientific, Equitable, Attainable, Secure,

and thus bringing it into the category of all genuine Insurance.

(1) **Object: Remove Anxiety; Protect the Assured,** the same exactly as in all true insurance. "Twice bless'd, it blesses him who gives and him who takes," the insured who lives more than the insured who dies: the former does not therefore pay his money for nothing, more than in Fire and Marine Insurance. It also seeks to bless him at least cost; to give him

***The most Assurance for the least Money,***

compatible with perfect security; hence adopts the only correct

(2) **Principle: "Bed-Rock"; Grading Life Risks,**

each according to his individual characteristics in regard to **A**ncestry, **C**onstitution, **H**abits, **V**ocation, **R**esidence, **H**ealth, etc., etc., much to the advantage of the

***Best Grade Risks,***

who are thus advanced the first step toward the grand result:

**$10,000 Assurance for $60 Premium.**

A document, "Biometry," explains this solid-rock foundation principle of all correct insurance, also gives the Indications of Longevity. Send for one; also for Grading and Rating Blank.

(3) **Method: "Hard-Pan"; "Natural" Premiums.**

In Life as in Fire Insurance the cost arises from two causes: the losses, called the "*net*", and the general expense, called the "*loading*"; both constitute "*gross*" cost. Why should not this be paid year by year in life as well as in fire insurance? It should be, and nothing more under any specious pretext whatever. This "Natural" Method makes the cost very low at the lower ages, when insurance is needed, and high, only at the high ages, when nobody wants it at any price, and is the second step toward the Grand Result, (see next page).

# $10,000 Assurance for $60 Premium.

## (4) Mode: Good-Examination Yearly "Rebate".

Life Insurance differs from Fire Insurance in this, that life is subject to defections. It must therefore be covered for the

Term (Labor-Term)

during which there is any probability of insurance being needed.

These defections will increase the risk, and of course the cost from year to year, and the longer the Term the greater this increase. The table premiums are made for those insured for some time, in some of whom defections are presumed to exist, but as these are supposed not to exist when a person is first insured,

**The New System properly Rebates the Table Premium**

for the first year. As in most of the Best-Grade Risks the defections will not occur from year to year, the insured at his option may be examined yearly, and if he is then found to be in "good-condition" he will be, as in justice he should be,

REBATED YEARLY.

In case he has become defective, he is simply remanded to the rated "*Natural*" premium of his policy,—even then much more favorable to him than the "Old Plan" would be at its best.

**This New, Truthful, and Important Rebate Idea,**

the legitimate offspring of the Grading Principle and of the "*Natural*" Premium Method, and worked as yet by this Company only in all the world, is a long and last step to the Grand

## (5) Results: $10,000 Assurance for $60 Premium,

Small Risk, Small Premium, Small Liability,

Large Assurance, Large Satisfaction, Large Security,

etc., etc., prefigured at the outset, page 2 which see, and much else, for full account of which, and for proof of correctness, send or call (if by mail send stamp) for exceedingly interesting

**Documents, Explaining Each Point:**

## American Popular Life Insurance Co.,

CENTRAL OFFICE:

419, 421 Broadway, New York City.

**Commissioners of reliable character wanted in every county to work the New System, not by "boring" people, but by presenting it attractively by Documents, etc.** (See page 2.)

S. M. WHISTLER,
Gen. Ag't,
HARRISBURG, PA.